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Communications.

INSTRUMENTAL DIAGNOSIS.

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(Continued from page 29.)

II. Ophthalmoscopic Characters of the Diseases of the Retina.

5. Retinitis Pigmentosa, or Spotted Retina.

Is a pathological condition of curious interest, but from the few opportunities offered for dissection yet remains, as regards its morbid anatomy, in an exceedingly unsatisfactory state, so that observers are not one as to its exact nature and relation with pathological conditions of the ocular membranes. It has been thought by some to depend upon chronic inflammation; according to Pilz it is encountered sometimes without the least connection with retinal inflammation; but in his hands, the ophthalmoscope has always revealed the presence of retinal atrophy. Stellwag and Junge entertain the view, which seems the most probable, that the disease depends upon some peculiar changes in the walls of the vessels of the retina. The pigmentation, at any rate, seems to have some important connection or dependance upon them, as the pigment is always distributed along their course, forming radiating lines with a point in the neighborhood of the papilla or the macula as their centre. This constant and peculiar arrangement of the dark coloring matter in bands, has conferred upon the disease the designation of the *tiger stripped retina*.

Observation has shown that the pigmentation always begin in early life, is often hereditary, and also in a large proportion of the cases, according to Liebreich some blood-relationship can be traced between the parents of the victims.

The influence of marriages of consanguinity is further shown in these cases of pigmental degeneration of the retina by the frequent association with them of some form of impairment of intellect, and defects in the organization of the auditory apparatus.

The disease usually affects both eyes, and progresses equally, although the subjective phenomena in both are not in exactly the same proportion with these changes, for the narrowing of the field of vision, and diminution in central sharpness are always further advanced in one than in the other. One eye has, however, in rare cases been found to be solely affected.

Even before the changes in the retina can be detected with the opthalmoscope, some defect in the power of vision is manifested, and almost always that form of it, characterized by an inability to see clearly during the night, called hemeralopia in rare instances nyctalopia has presented itself. There is a continual movement of the eyes observed, but not of the character of the astygmatic motion. At a variable period, the pigment begins to be deposited on the nasal side of the retina, between the papilla and the ora serrata spreading circularly, anteriorly, and posteriorly. The progress of the disease is quite slow, often extending even years before the retina becomes pigmented to a sufficient extent to abolish vision. The mode in which this is affected, is an important feature in the history of the disease, sufficing of itself to differentiate it from cerebral amaurosis. As stated above, the pigmentation spreads equatorily so that there will be a circumferential limitation of the visual field, and as the belt broadens, the narrowing of the field becomes greater and greater until it is perhaps reduced to an aperture of 10° or 15°; the central sharpness of perception will all this time remain sufficiently great

to enable the person to read fine type. On the other hand, in cerebral amaurosis, central sharpness is first impaired, while in that form of this disease, depending upon atrophy of the papilla and retina, the limitation is lateral, and very irregular until it is reduced to a mere horrizontal slit.

With the opthalmoscope, the peculiarly figured fundus can be easily seen, and the nature of the case exactly determined upon. The papilla presents the appearance of atrophy; the central vessels are diminished in size, and in an advanced stage of the disease are perceived as mere lines of a whiteish color, coursing toward the periphery. The thickness in the walls of the larger vessels often reflect the light in such a manner that they present bright borders. The arrangement of the pigment in round, oval or stellated spots, or in lines along the vessels, is so characteristic and peculiar that when once seen it cannot be mistaken for anything else. It is principally deposited in the anterior layers of the retina, and encircling the globe at its equator.

Always with these retinal changes, there will be found more or less alteration in the choroidal pigment, occasionally turbidity in the vitreous humor and frequently siliculose cataract.

6. Inflammatory Softening of the Retina.

There has been met rarely a form of amaurosis depending upon inflammatory softening of the retina, usually following choroiditis with plastic, effusion from the capillaries of the vasa vorticosa. The disease progresses rather slowly, and alway eventuates in atrophy of the optic papilla and the retina, and consequent destruction of the power of vision.

The nerve-cell layer of the retina becomes infiltrated with a grayish white matter, which confers upon the fundus a bright striated appearance, and a yellowish white reflection. The papilla becomes involved, and as the disease progresses further, the surface presents an ecchymosed and fine red-sprinkled aspect in patches, obscuring the retinal vessels. The resulting atrophy from pressure of the effused matter is attended with an almost complete obliteration of these vessels, when the retina and papilla present a white shining appearance.

7. Anemia of the Retina.

This affection is uncommon, it is characterized by the patient complaining of weakness of vision, for the relief of which he vainly employs glasses. Sometimes a cloud overspreads the field of vision, or the vision is disturbed by flakes of light, black specks floating before the eyes, or variously colored spectra. The ophtholmoscope reveals a diminution in the size and appearance of the vessels, both of the retina and choroid. The veins are pinkish, and very dilated, the arteries much contracted, and of a bright orange, while the choroidal vessels are of a pale yellow color. As the disease progresses, the circulation is completely arrested in the vessels which gradually disappear, or are only recognizable as threads. The macula becomes undistinguishable, and often numerous small spots of extravasated blood may be seen in its neighborhood. When the vessels have disappeared from the papella, it atrophies, and presents a white glittering appearance.

Anemia of the retina is always connected with impaired circulatory activity, the heart beating feebly, and the constitutional vigor of the patient is depressed so that the physician should ever be mindful of pursuing his search beyond the eye in examining a case of this kind, to the uterine organs, and remember that any treatment undertaken with any promise of success must be addressed to the system at large. Though rarely can anything be done to stay the further progress of the disease or ameliorate the present condition of the patient; for the anemia will most certainly result in atrophy. Paracentesis and iridectomy promise the best results.

8. Atrophy of the Retina.

This pathological condition of the retina most often is found in connection with the same change in the optic papilla; the latter we have already described so that it now only remains for us to consider the disease as it is observed to occur in the retina. It is encountered under two forms, pure or grey, and cloudy atrophy, differing from each other only in the extent of their destructive ravages in the layers of the retina, and the amount of proliferated connective tissue, the former variety being marked by its limitation to the anterior

layer, and the subsequent atrophic degeneration of the connective tissue, while the cloudy form involves the choroid and bacillary, as well as the anterior layer, and the hypertrophic connection tissue generally remains as a characteristic feature of the progress of the disease.

In the mildest grade of atrophy, the layers of the retina may still be made out, although considerably altered. In a more advanced stage all discrimination of boundaries between these are lost, as well as the distinction of their normal anatomical elements. The optic nerve is shrunken to a dense white cord lying loosely in its sheath, to which it is frailly connected by wide meshed cellular tissue. The nurilemma of the nerve-fibres is thickened while the filaments themselves are much changed, and even entirely destroyed, being replaced by a detritus of molecular fat. The degenerative changes in the proper nervous elements of the optic nerve and retina sometimes proceed further, resulting in the production of yet lower forms of organization, so that here and there small calcareous, pigmental osseous deposits are seen alway with the fatty matter.

This career of retrogressive metamorphosis in the retina, markedly in this cloudy form of atrophy, is always associated with alteration in the adjacent structures. The vitreous humor becomes clouded, especially toward its periphery; the choroidal pigment is destroyed in patches, exposing the sclerotica beneath to view, and in total atrophy, the retina is separated from the choroid, and forms a conical or funnel-shaped body, the base of the cone looking toward the ora serrata.

The subjective symptoms presented are always diminution in visual power, and lateral limitation of the field. The atrophy progresses with great irregularity, sometimes rapidly reducing the sight to a mere perception of light in a few weeks; at others, reaching over many months or even years. The amount of vision is not, however, in proportion with the apparent amount of atrophic degeneration, for in some cases the lowest degree impairs the function of the eye to such a degree that light is barely appreciable; in others, much greater changes are not incompatible with the clearest perception of diamond type.

The causes of atrophy are mostly intraocular, such as inflammation of the optic nerve and retina, choroiditis, glaucoma, or indeed, any morbid condition of the media or coats of the eye giving rise to intraocular pressure; sometimes we find the conditions originating in sanguineous effusions, tuberculous or other specific deposits into the brain or spinal marrow. Encephalic inflammation and tumors of the brain, especially those located about the optic foramen, and pressing upon the nerve are also occasional causes.

The ophthalmoscopic characters will, of course, vary with the stage in which the examination is made, and according to the form of atrophy present. In pure atrophy, which is usually restricted to the papilla and arterial layer of the retina, the earliest evidence of the disease is the presence of an oval glistening spot upon the nerve-disk, reaching from the point of convergence of the central vessels to the temporal margin, which resembles, in some degree, congenital excavation, but may be distinguished from this by the position of the vessels, in not presenting the sharply marked curving around their margins. The spot gradually enlarges upward and downward, until the whole papilla is involved, which is then found to be cleared of all the finer vessels normally existing upon its surface, and to present a glistening white reflection, often resembling that of mother-of-pearl; the disk retains its rounded form and distinct outlines, being bounded by the bright connective tissue ring. The larger vessels are usually still present, and their thickened walls reflect the light in such a manner as to margin them with bright borders; sometimes, however, the arteries appear diminished and the veins enlarged, and in the highest degree of atrophy, both orders of vessels are greatly lessened in size, so as to be only distinguishable as fine whitish lines running over the fundus. In gray atrophy, the yielding of the lamina cribrosa produce some degree of cupping of papilla, but the cœtaneous thinning of the superjacent nerve-tissue destroys it.

In cloudy atrophy, the color of the papilla is grayish-white, and does not present the pearly reflection until a very advanced period of the disease, and only

in some cases then. It is often changed in shape, presenting an oval or even angular outline, produced by a projection of the pigment from the choroidal margin. The vessels of the papilla are more diminished in size, and very obscurely seen upon the pale yellowish color presented by the whole fundus, which is most frequently further modified by the presence of pigment deposited in flecks or lines, or, more rarely, of cholesterine or laminated cicatricial deposits dotted here and there over its surface, the former presenting a glistening appearance, and the latter a bluish-white color.

9. Serous Effusion into the Retina.

This condition of the retina has been both diagnosed with the ophthalmoscope, and established by post-mortem examination. It is a pathological alteration, frequently of serious import, and, according to Desmarres, depends upon derangement in the choroidal circulation, as serous chemosis does upon that in the conjunctiva.

The œdema occurs suddenly, rendering the patient hemiopic or amaurotic. The fundus of the eye is pale, and a veritable puffiness is observable around the optic disk, while the elevated portion of the retina, determinable by the position and appearance of the vessels, compared with the rest of the fundus, is less brilliant and of a bright-yellow color.

Desmarres has observed it in retinal hyperæmia, congestion of the choroid, sometimes in cases of slight catarrhal conjunctivitis, and always in amblyopia originating from syphilis.

10. Plastic Effusion into the Retina.

In this form of effusion into the substance of the retina, the morbid changes that dissection have revealed are, according to Zander, chiefly the presence of granular cells of roundish or irregular outline, sometimes with a cell wall and one or two nuclei rendered turbid by fat, and mostly situated in the granular layer. They have been present in great numbers, partly scatteredly, partly aggregated in voluminous clusters, and are resistant, strongly opalescent bodies, very insensitive to re-agents, and in appearance sometimes irregular, sometimes resembling ganglion cells, possessing a similar contour, with processes, and containing in the centre a dark opalescent body, like a nucleus. There has also been hypertrophy of the basic connecting tissue, with molecular turbidity and fatty degeneration, such as always attend saturation of the tissue and separation of its elements by a coagulable, homogeneous fluid. The nerve elements are often unchangeable, often thickened, fatty, and turbid.

The eye in such cases usually presents quite a natural appearance exteriorly. The ophthalmoscopic characters of the affection are, however, well defined, and with attention, the nature of the case can pretty well be determined upon. The effusion is seen under various forms, sometimes as minute grayish-white dots scattered over the fundus, which in some places are aggregated into larger spots; again it is observed, and principally in the neighborhood of the optic papilla and macula, in large irregularly bordered patches of a whitish color, though this, in some instances is modified by reddish, yellowish, or bluish tints. Mingled with these spots, heaps of pigment are also present.

It is important in deciding upon the character of the alterations in the appearance of the fundus, to observe the positions and relations of these spots with the retinal vessels, for upon this depends the diagnosis of retinal from choroidal effusion. In the former, the matter being poured out into the substance of the retina among its vessels, will more or less obscure, if it does not entirely conceal them from view, so that they cannot be followed across the altered portion of that membrane, but suddenly cease, as if cut off at the border nearest their origin, and reappear again as suddenly at the opposite border. Sub-retinal effusions and alterations in the choroid lying behind these vessels, will form a white background, over which the vessels may be seen distinctly crossing from side to side, without interruption.

When the usually grayish-white retinal effusion is modified by a reddish tinge, it requires careful examination and wise discrimination to detect it, inasmuch as it is then so nearly allied in color with the natural rosy tint of the balance of the fundus, as to readily mislead one either into

the belief of the absence of retinal change, or that the really diseased portion of this membrane is the healthy one, and the normally colored portion surrounded by it, the unhealthy one. These facts are mentioned to put the observer on his guard, to make due allowance always for the effects flowing from the contrast of color.

[To be continued.]

SULPHITE OF SODA IN SYPHILIS.

BY S. J. RADCLIFFE, M. D.,
Of Washington, D. C.

The sulphites and hyposulphites are fast coming into general use in this country; and the profession universally, we are sure, will not be slow in recognizing and appreciating the researches of Prof. POLLI, of Milan, D. E. RICCI, and others, or in giving them their due therapeutical application. Whether or not they will ever be looked upon in the light of specifics, or be considered as true and unerring in their application to the diseases in which it is claimed they are appropriate as bark or quinine are to miasmatic diseases, is a matter yet to be tested; but that they will have a controlling influence upon most of those diseases classified among the septic, zymotic, or blood-poison diseases, cannot, I think, well be doubted. I have frequently had occasion to test their value in most of low forms of fever; and recently, in carbuncle, have had the most gratifying results. In a case of carbuncle that recently came under my observation, of enormous size, and fast undermining the constitution, after using the ordinary treatment, including the knife, with but indifferent results, resort was had to sulphite of soda, and the condition of the general and local symptoms were changed in a marked degree, almost from the commencement of its use, and the recovery was speedy and complete. No case have I ever treated with more satisfaction to myself or the patient. There is, I believe, much encouragement to be looked for in the treatment of all such diseases with these remedies and I think good results may confidently be expected in their exhibition at all times. From a digest of Prof. POLLI's views, we learn that "pyæmia and septicæmia, and all the class of fevers with putridity and purulent absorption, such as hospital fever, puerperal fever, anatomical inoculation, and the like, have been treated by the sulphites with advantage; that the results have been very striking in the observations made in the treatment of endemic and miasmatic fevers; that they are found to cure a larger number than quinine, and more completely; and in measles, scarlatina, small-pox, and all the exanthematous diseases, and in typhus, great good has been obtained; and also that, though he does not venture to assert that they will prove available in the cure of cholera or the plague, he thinks there is reasonable ground for concluding that they will be highly useful as prophylactics in destroying the fermentable material upon which the malignancy and fatality of these pestilences chiefly depend." I use nearly the words of the digest. (See *Braithwaite's Retrospect*, July, 1866.) Acting upon the suggestion and references which he makes in regard to the subject of syphilis, and upon the general applicability of these remarks to all blood-poison diseases, finding in many cases of this effection, the treatment was very unsatisfactory, especially in those cases which had become, so to speak, fixed in the constitution, and so hard to eradicate—with sycosis, extensive ulcerations of the throat, and various portions of the body, suppurating buboes, etc.—I began the treatment of syphilis with these medicaments, and in no case have failed to derive benefit. Many of the cases embracing such as are noted above, at the beginning of treatment were quite unpromising, or had resisted more active measures; and embracing also those out-door patients who could not be watched, or restricted to a certainty to those hygienic measures which are necessary to a healthy action of the organism.

Though I directed my attention in the first instance to secondary or tertiary cases, believing it was in those I had an opportunity to estimate their therapeutic action; I have more recently also prescribed the sulphites and hyposulphites in primary syphilis, after a slight mercurial treatment, with decided advantage. In the older secondary cases, and those in a transition stage from secondary to tertiary, with local manifestations consecutive to pri-

mary chancre, such as phagedenic ulcerations, disease of the mouth, fauces, and nasal passages, I have found, with the internal and external exhibition of these remedies, the parts healing well and healthily, the cachexia disappearing, the patient more cheerful and hopeful at a very early period; and in the primary cases I have found the primary symptoms reduced in violence, the chancre healing, and the early eruption of the skin much limited in extent, and of shorter duration, and I think it will be found that the lymphatic glands will less frequently enlarge, and suppurate more rarely. In no instance have I failed to receive some advantage in their administration, and this is saying a great deal in favor of a single remedy or class of remedies. My experience, however, in treating syphilis with the sulphites and hyposulphites may be considered limited, and I may not be able to give a fair estimate of the value of these remedies in this disease, but simply record the outline, or make a note of the little experience I have had in this manner, with a view to calling attention to their action, more particularly in syphilis, and to elicit further investigation and experience from those having more opportunity for observation.

It was in chronic cases, as I remarked, that I resorted to the sulphites and the hyposulphites in the first instance, and being so satisfied with my attempt and progress, am sanguine now of their applicability and fitness for primary syphilis. Intending to pursue this subject further, I may, on some future occasion, have an opportunity to classify and tabulate my experience, with a view to more decided information, and for the present will restrict myself to these limited statements. I am confident—though I do not advise their use, to the exclusion of all other treatment—a trial of them will repay the practitioner, and am sure he will be satisfied—I might say, will be astonished—or, at any rate, will not be altogether disappointed in the result.

I prefer the sulphite of soda to the other sulphites, or to the hyposulphites, as I have derived more benefit from it. I give from ʒj. to ʒij. daily, finding this, in the majority of cases, sufficient, in divided doses, say three times, or four times a day, in simple solution in water, or in cinnamon water and compound tincture of cardamoms, continuously for an indefinite period, or until some change is observed for the better, and according to the progress of the case. Usually, in the course of a week or less, some action is manifested, and it must then be persisted in without abatement, to the consummation of the desired object. I have been pleased indeed, to see men coming to me with cheerful faces in a little while after having suffered, for perhaps a year, with a hopeless future, as amongst its other properties it has a peculiar reviving, exhilarating influence upon the system, which seems to show itself from the beginning. I observed this property primarily in carbuncle. In external exhibition, I use it in simple solution in water, or glycerine and water combined. In ulcerations of the mouth and throat, I direct a simple solution, or as above, as a wash or gargle; and as a wash in syphilitic sychosis it acts with remarkable promptness. Of course, every other direction necessary to keep the system in healthy action, patients are instructed to observe strictly, for in this depends very much of the success of the case.

THE USE OF WIRE-GAUZE IN THE TREATMENT OF FRACTURES AND OTHER INJURIES OF THE LOWER EXTREMITIES.

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As the science of medicine is indebted for its present grand and commanding position among its sister sciences, to truths which found their development in the necessities of our race, and as each established principle or fact may still serve as a nucleus around which other facts may accumulate and expand, it should be regarded as a duty, by every practitioner, incumbent upon himself personally, to make known for the general good of the profession, all such facts as may be developed under his experience or observation. Conformably with this obligation, I purpose calling the attention of surgeons, as briefly as practicable, to an addition I have made to my *arma-*

mentarium in the treatment of fractures, wounds, etc., of the lower extremities.

My attention was directed, some time since, to the importance of modifying and improving upon the apparatus known, particularly in this vicinity, as "SMITH'S Anterior Splint," an application that was recommended, some years since, to the profession by Dr. NATHAN R. SMITH, of this city. But whether original with him or not, is immaterial in this connection. It possesses, as all are aware who have given it a fair trial, important advantages over the splints, inclined plane, etc., so much in vogue a few years ago, and which still have many respectable and strong advocates. But experience has demonstrated to me, and some of my friends also, that the end was not reached, nor perfection attained in the SMITH splint, however much such a consummation was hoped for or expected by its friends, when applied to the treatment of fractures and injuries of the lower extremities.

I was called, during the past summer, to see a young woman who had fallen heavily and with great force upon her right knee, severely injuring its articulation, while playfully running with a young man over some boards or plank that had been thrown loosely over a scaffold. Whilst running over this rough surface, the toe of her shoe caught against a board, and the young man, in attempting to prevent her falling, lost his balance, and both fell together, he falling upon her. The accident occurred at a village a few miles from the city, and two physicians of the place, who were called in, decided to apply SMITH'S Anterior Splint. It was done in the usual manner, and she was brought to her home in the city on the following day. I saw her a few hours after her arrival, and found her suffering great pain in the injured knee and leg. I arranged the suspensory cord and pulley, re-adjusted the bandage, prescribed a full dose of morphia, and left her for the night. To my surprise, I found, on my visit the succeeding morning, she had not slept, and had suffered great pain in the knee, and much unpleasantness in the thigh and leg, in consequence of the bandages growing tight from an increase of swelling in the limb. The weather was very warm, and the young woman large and fat—weighing probably two hundred pounds—and as there was but little chance of rendering the apartment more comfortable by ventilation, I determined to make her condition as much so as possible by other means. For this purpose I procured at a store, a yard and a half of very fine *wire-gauze*, and after taking the proper dimensions of the thigh, popliteal region, and leg, had the wire-gauze cut so as to adapt it to the posterior and lateral surface of the limb, and bound around with stout cloth, to which, at proper intervals, pieces of strong linen tape were securely sewed. The limb was now made nude by removing the bandage that sustained the splint, and the wire-gauze, as above prepared, placed in position *under* it. When this was accomplished, the "anterior splint," receiving proper shape, was placed over the *front* of the extremity, the wire-gauze secured by the tapes to its longitudinal bars, and the hooks from the suspensory apparatus having been passed into the rings or eyelets of the transverse bars of the "splint," the limb was swung from the bed.

The greatest comfort was immediately experienced by the patient, and after adjusting the lengths of the tapes, so as to obtain evenness and accuracy of adaptation of the wire-gauze to the surface of the entire limb, the patient was left for the day. The whole manipulation, from the time the wire-gauze was ready for application, until the procedure was completed, did not occupy as much time as I have taken in writing this account of it. If the details above given, are sufficiently clear of comprehension, it will be observed that the important objects of extension, and counter-extension, were as fully accomplished in my case, as they could have been by any other means, while the great relief from all *anterior* compression of muscles, and the free exposure of the surface of the limb to the atmosphere, not only anteriorly, but laterally, and posteriorly also, were sufficient to impart all the comfort she experienced from the change of treatment. But the scientific surgeon will readily perceive other, and, if possible, greater advantages, which may be obtained from the wire-gauze, in the management of fractures and wounds of the lower extremities; or,

perhaps, we should rather say, great additional advantages, for it is difficult to conceive of any much greater advantages than free ventilation in such cases. The chief of these advantages are so apparent, as to scarcely require to be mentioned; such, for example, as in compound and comminuted fractures, saber and bullet wounds, or in other wounds involving the skin and subjacent structures, and requiring frequent ablutions or dressings, without disturbing the general position or condition of the limb, a desideratum which will be sought for in vain outside of the wire gauze.

A wound may be clearly seen, and freely syringed or sponged, and even receive other local treatment *through* the wire-gauze, when posteriorly or laterally situated, without disturbing the position of the limb in the slightest uncomfortable degree. Again, where it is desirable at any point, to remove undue or uncomfortable pressure, nothing is more easily accomplished, as the tapes, or what is preferable, leather straps and buckles, attached to the wire-gauze, may be slackened or tightened at such points as may be necessary to secure the desired relief. By this management, undue pressure on the muscles is almost completely obviated. Besides the foregoing, there are still other advantages attainable when the wire-gauze is properly attached to an anterior "splint" or support. But each case will render these severally apparent to the intelligent practitioner, and indicate the mode and manner of their achievement.

Experience has fully satisfied me, that with sufficiently fine wire-gauze, accurately cut and adjusted, by leather straps and buckles, to the anterior supporter, or splint, no zagging occurs, and the patient is rendered far more comfortable than he could be made by any other known means whatsoever. I regret not having a drawing of the apparatus as applied, but feel confident that a little thought will enable almost any one to prepare and adjust the appliance, with as much ease as that of an ordinary fragmentary bandage.

I could mention quite a number of professional names in support of my own convictions of the utility of the wire-gauze appliance, but will only allude to those of my colleagues, Professors Chancellor and Warren, of Washington University, and Professor Chisolm, of the South Carolina Medical College, now a resident of Baltimore.

SYPHILIS—ITS NATURE AND CAUSE.

By Geo. W. Lawrence, M. D.,
Of Hot Springs, Arkansas.

Syphilis should be regarded as an *entophytic* ill. One that is frequently locally engendered. A disease that is daily developing, propagating *some certain vital conditions*, its own *specific septic germs*, in the vitiated emanations of its abnormal secretions.

It is a disease that does not belong to the cleanly and virtuous, except it arises from accidental impressions. It belongs to the *unclean*—those "not purified by rites." It results from the abuse of Divine law; it is a penalty for the sins of the flesh.

Inflammatory and irritative action of the *genito urinary surfaces* involves all functions, and makes follicular alterations, causes *parasitic growths* and *infectious* diseases.

The delicate tissues of the uterus, vagina, vulva, urethra, and prepuce, with the abundant supply of mucus orifices and epithelial cells, the entire secretions belonging to those parts, afford a suitable material for *septic transformations*, which altered agency sporadically generates *venereal* diseases.

Syphilis doubtless has existed from time immemorial. It originated in the genitals. "It is the soil where ills promiscuous springs."

Meterological disturbances, changed electrical condition, sudden transitions of cold, emotional distress, morbid excitation of amorous passions, visceral congestion, age, sex, temperament,* race, general state of health, all favor the development of degenerate *organisms*, and produce a train of ills such as uterine catarrh, leucorrhœa, vaginitis, vulvitis, urethritis, balanitis, pruritis, herpes, follicular ulcerations, blenorrhagia, and syphilis. Can we not demonstrate microscopically, distinctly notice the law of pathological development advancing from simple *genito-urinary* disturbances

* Syphilis is more promptly amenable to treatment in the pure bred African race.

onward to the true virulence of venereal maladies? Have we not morbid forces sufficiently alive in depraved secretory action to give syphilis a spontaneous origin, pathological conditions capable of producing and evolving the peculiar algoid toxic spores?

The introduction, dissemination, and diffusion I assume have not simply in all cases been through the old alleged medium of propagation, *i. e.*, contracted through voluntary personal contact, or infected directly through inoculation, vaccination, hereditary impressions, involuntary or accidental causes. It is a *special self-producing germ*, conditioned from *septic* results, which generate in the inherent surroundings the necessary "*materies morbi*" for its peculiar wants and original formation.

It can be propagated through mysterious ways, mediate and intermediate, introduced artificially, or contracted from *any abnormal secretion that contains the specific germs, spores or filaments of matter*, so that it will by contact *impress* the system by absorption, and these accumulate by vegetation, its specific loathsome ills.

Syphilis, like all other diseases, had a great first cause, an origin, a source. The cause that generated syphilis had prevailed and yet remains. The spores of diseases, produced by *uncleanliness*, as recorded by Moses, the great lawgiver, doubtless existed anterior to his generation, they still exist, and will continue operating to provoke results.

Is it not unintelligible in the present age of scientific enlightenment to imagine to the contrary? Would it not be a reproach to science, to our boasted medical advancement to suppose that syphilis has *alone* been increasing exclusively thus *without check or cure*, since the great epidemic of the fifteenth century?

The following considerations I entertain are important to syphilitic patients.

1st. That syphilis is caused occasionally by septic results in certain morbid secretory developments.

2d. That it is erroneous to suppose that syphilis is only transmitted or *disseminated* directly or indirectly by chancres or consecutive accidents.

3d. That the arbitrary stages, divisions or accidents of the disease have received too much significance or professional refinement

4th. That the *impressive* stage (*i. e.*, evolution of primary developments,) throughout all the *consecutive* manifestations, down to the *aura syphilitica*, (which is evident in the cachexia) is one and the same syphilitic poison, modified only by constitutional or vital influences. VIRCHOW, in part, has previously declared this, and SALISBURY not only confirms but *illustrates the "crypta syphilitica"* as the veritable toxic parasite.

5th. That syphilis if neglected is an *accumulative* ill. A disease, if curable in the advanced *consecutive* forms, can more readily be arrested and annihilated in the *impressive* and earlier stages.

6th. That the blood of the infected and *all secretions that contain specific spores and filaments* are capable of producing syphilis under favorable circumstances by inoculation.

7th. That where other signs do not exist to demonstrate syphilis the *microscope* must decide and be relied on to reveal the mysteries and doubts concerning the disease. Chancres and chancroids must be satisfactorily investigated, brought within the same field of vision, there scanned by the educated eye for satisfactory results. The *microscope alone must unveil and determine the points in controversy between the unitists and dualists.*

8th. That *prophylactics* should be more generally regarded and encouraged by the profession to prevent the spread of syphilis.

—— The celebrated MAX VON PETTENKOFER, Professor of Hygiene in the University of Munich, recently visited Malta, Gibraltar, and other localities on the Mediterranean, to gather facts for the support of his theory, that the cholera poison is connected with a certain amount of moisture in the soil. The English Government assisted his investigations very liberally, and we learn from the *Allg. Med. Central-Zeitung*, that the Professor returns well satisfied with the facts he has discovered.

—— The enlargement of the Prussian army includes the appointment of one hundred and sixty-five military surgeons of various grades, and even with these the wants of the army are only partially supplied.

Hospital Reports.

Pennsylvania Hospital,
Philada., March 28, 1868.

Clinic of J. M. Da Costa, M.D.

Reported by Dr. Napheys.

Cases of Pleurisy.

Case 1. Rebecca H., æt. 19; domestic; of healthy family; a hearty, well nourished girl; admitted March 16th. No history of any ailment prior to March 7th, when she was seized with severe pain in the right side of the chest. This pain moved downward from the shoulder; it was associated with a cough, but a cough slight and without any sputum, or at least with an expectoration very trifling. When admitted on the evening of the 16th, there was dulness over the right side, particulary at the lower portion. Posteriorly, at the inferior angle of the scapula, there were friction sounds and fine râles; no tubular breathing anywhere. The respirations at the lower part of the right side, where there was dulness on percussion, were feeble. The vocal vibrations on that side were decidedly diminished, as compared with the left. Pulse, 140; respirations, 32; skin, dry and heated, but not hot; and the patient very weak.

These signs at once evidenced pleurisy with effusion, in which, however, the effusion was not very considerable, as shown by the presence of friction-sounds at the inferior angle of the scapula. The fact that there was no destinct tubular breathing, proves the absence of any pneumonic complication. There were a great many râles on the left side from accompanying bronchitis.

She was placed on nitrate of potassa, five grains; Dover's powders, three grains; and one-fourth of a grain of powdered digitalis, every fourth hour. Poultices were applied on the right side, alternating with turpentine stupes. On the 19th inst., in the evening, it was very evident that no improvement had taken place in the symptoms. Her pulse was 140, very much the same as on admission; respirations, 36; and the temperature, 103 3-5. Nor was there any improvement on the next day. The alæ of the nose worked a great deal; evidently the respiration was much embarrassed.

The powders nauseating her, and not answering the purpose, they were suspended, and on the 20th she was ordered two grains of pil. hydrarg-gri, with one-fourth of a grain of opium, three times a day. Under this treatment she commenced to improve; gradually there has been a reduction in the frequency of the breathing and in the amount of the effusion. The treatment was persevered in until the 24th, when the gums being slightly touched with the mercurial, it was suspended.

To-day she is perspiring a great deal; pulse, 136; respirations, 36; temperature, 102. She feels stronger. Her pulse, however, is rather feeble, as indeed it has been throughout, notwithstanding the healthy appearance of the patient. There is good resonance on the left side anteriorly. On the right side anteriorly, the dulness does not begin until the mammary region is reached; above that the sound is somewhat tynpanitic, higher pitched than the vesicular sound of the left side. At the back, on the right side, there is still dulness on percussion, which does not begin fairly until fully two inches below the angle of the scapula. At the upper portion of the right lung the resonance now is fair. The most marked friction-sounds are now perceptible posteriorly, over the right lung, even low down. Some friction-sound is also heard anteriorly, in the right mammary region and below; above that vesicular breathing is perceived.

There is here decided diminution of effusion, as contrasted with the record taken on the first day of admission. The dulness is much less, and the friction-sound developed over a much larger space. The case is, therefore, progressing favorably. The improvement only commenced with the alterative treatment with the mercurial; after the mercurial had shown a constitutional impression, it was not advisable to push it further. Therefore, on the 24th inst., the treatment was changed to five grains of iodide of potassium, with ten of acetate of potassa, in a drachm of syrup and three drachms of solution of acetate of ammonia. She also took a Dover's powder at night, which did not produce nausea.

Under this treatment she has been improving, and everything is now going on well. Throughout the case the patient has been given a moderate amount of stimulus. This has been done reluctantly; but as she was very feeble at times, and as the difficulty of breathing caused her to be quite exhausted, it was judged advisable to give a small quantity of stimulants, not as any plan of treatment, but simply to sustain the strength until the remedies could take effect. She has been rather supported than stimulated. The character of the first sound of the heart and of the pulse, furnished a guide in the administra-

tion of stimulus. When the pulse was feeble it was administered; when the pulse went up, it was withdrawn.

The treatment will be continued, with the addition of a blister, 6 x 8, on the right side, on the back, which may now be employed with advantage, as the effusion is being absorbed.

Case 2. Daniel McK., æt. 27; gardener; admitted March 13th. He had two severe malarial attacks at Fortress Monroe in 1862. Six weeks before his admission he suddenly lost consciousness. He says he had had no symptoms of any disease prior to this loss of consciousness, which he describes as a faint. He states, however, he had shortness of breath for two days previous, but no pain in the side. When admitted he had a very cachectic look, his breathing was hurried, lips bluish, and it was with great difficulty he was brought into the ward in a much exhausted condition. On examining the chest, marked dulness was perceived over the whole of the right side, with great bulging. Respiration was almost absent on that side, excepting perhaps at the very apex. A tremulous, extended impulse in the cardiac region, increased percussion dulness and a muffled first sound were also noticed.

At present, the right side is still dilated. It measures now nineteen inches on a level with the nipple, against seventeen and one-eighth on the left side, showing therefore a difference of one and seven-eighths between the two. There is bulging of the intercostal spaces in the right side, where there is still dulness on percussion anteriorly and posteriorly, excepting just under the clavicle, where some approach to the pulmonary sound is obtained. The vocal vibrations, which are distinct on the left, are not perceived on the right side. As regards auscultation, everywhere on the right side the murmur is faint, though not so faint as it was on admission, when indeed no murmur could be heard toward the inferior angle of the scapula. With reference to the heart signs, there is a tremulous action in several intercostal spaces, but lacking in anything like force. On applying the ear there, the first sound is found to be still dull and muffled; while the percussion dulness is increased.

The diagnosis in this case is plain. The dilatation of the chest here existing, the absence of vocal fermitus, the comparative absence of breath-sounds, and the flatness on percussion, can mean but one thing—a pleuritic effusion. There is also a pericardial effusion, probably preceded by pericarditis. And the peculiarity of the impulse, the fact that the first sound remains more distinct than might have been expected from the existence of pericardial effusion, and the history of the case, all point to pre-existing hypertrophy of the heart.

Is this case to be treated by resorting to a mercurial impression, which was of so much service in the case just quoted? Inasmuch as the effusion has existed for two months, and is complicated with cardiac disorder and a cachectic state of the system, it is not advisable to employ mercury. In the other case there was an opportunity to make the mercurial impression within about two weeks of the time of seizure; in this, two months at least of time has passed. The fluid in the chest is now no longer pure serum; some pus is admixed with it. The attempt will be made to stimulate absorption, while nourishing the patient. He has been taking fifteen drops of the syrup of iodide of iron, three times a day, and fifteen grains of acetate of potassa, in two ounces of infusion of broom. The acetate of potassa has been lately stopped, and the iodide of potassium, five grains, were substituted. The chest has been painted with iodine, and blisters will also be resorted to. He is taking four ounces of whisky in the twenty-four hours.

He passes now about two quarts of water a day; a diuretic action evidently going on. He is clearly improving; if the improvement does not progress reasonably, the aid of the surgeon will be called in, to let out the fluid before it is too largely altered into pus.

EDITORIAL DEPARTMENT.

Periscope.

Anæsthetics.

In the *British Medical Journal*, for June 13th, are the following observations on this topic: The blessings and advantages of anæsthesia under the knife are so great, that it is not likely that even the fullest knowledge of the risks attendant upon the use of anæsthetics will influence persons who have to undergo serious operations to reject the opportunity of sleeping through the ordeal. But it is right that the full risks should be known both to the whole profession and to the public; and it is especially important that the particular mortality of each anæsthetic agent should be accurately ascertained. It is very noticeable, that the majority of chloroform-deaths have occurred where it has been adminis-

tered for brief and minor operations. The evidence appears to be accumulating in favor of the use, for such operations, of the protoxide of nitrogen gas, of which we lately described the remarkable advantages in respect to its rapidity and transcience of action, its agreeable odor, and freedom from subsequent ill effects—nausea, depression, and the like. Mr. Colton, who is now in London, produces an autograph scroll of twenty-seven thousand persons who have inhaled the gas in America for extraction of teeth and for minor surgical operations, with the most satisfactory results—pain having been annihilated, and the unconsciousness having passed away within one or two minutes, leaving only agreeable recollections. Some of the entries on the scroll are amusingly characteristic. Many of the patients "have had a high old time;" some "would have teeth pulled that way all day long." Here and there comes a bit of poetry, effusive and grateful, but not destined to immortality. Curter entries of "delightful dreams" are abundant. One gentleman, who came six thousand miles, thinks the journey not too long for the result. The continued experience of the dental surgeons of the Dental Hospital since the date at which we first referred to the subject; the introduction of the gas into London by Dr. Thomas W. Evans of Paris: the experience of Mr. Sercombe at St. Mary's Hospital, of Dr. Sanderson and Dr. John Murray at Middlesex Hospital, and of Mr. Ibbetson, Mr. Coleman, and Mr. Clover, who have been steadily using it and watching its effects, are more and more favorable to it. But we are not the less anxious to repeat the caution which we at first gave, that the pallor and blueness of the skin indicate that it is an agent having far too potent an influence over life to be trifled with; that it does not seem, as at present administered, to be suitable for prolonged operations; and that the purity of the gas, the perfection of the inhaling apparatus, and the skill of the administrator, must be considered essential elements in the successful use of the anæsthetic and the safety of the patient. The new and highly important scientific experiments of Dr. Sanderson and Dr. John Murray, to which we refer elsewhere, open up new views of anæsthetics, and are very favorable to the protoxide of nitrogen.

The Transactions of the Provincial Medical and Surgical Association for 1849, contains a great body of information, and seems to have been but imperfectly known to subsequent investigators.

"If it had been," writes Mr. Nunneley, "I can hardly suppose that more than one substance there noticed, and its value as an anæsthetic clearly stated, would since have been introduced as a newly discovered body. For instance, the substance which is now called the bichloride of methyl, but which was then known as the chloride of carbon (the composition of all these bodies being then undetermined, and but little understood, Turner stating the dichloride of carbon to be a solid crystalline fibrous body), and which has lately been so extolled as an anæsthetic, was thoroughly experimented upon, and thus spoken of. 'The chloride of carbon is a safe and not unpleasant anæsthetic; in action not dissimilar to chloroform and the chloride of olefiant gas, but not, I think, quite so powerful as either of these. The foregoing experiments are however, I think, sufficient to justify its trial upon man; and should it be found to answer, it will be valuable as being the cheapest of all the fluids which have yet been proposed, at least such as are likely to be used.' (p. 175.) The correctness of these results I years ago proved by its effects upon man. In operative surgery it is in no way superior to chloroform. The chloride of olefiant gas, and the bromide of ethyl, were proved to be not only most pleasant, efficient and safe anæsthetics, but in every respect superior to chloroform. These conclusions have been amply proved by the frequent use I have made of both of these agreeable anæsthetics in the performance of many of the most serious and prolonged operations to which the human body can well be subjected. So superior, indeed, to chloroform, do I consider both the chloride of olefiant gas and the bromide of ethyl, that, were the cost of their manufacture reduced, as I believe it might easily be, to a level with that of chloroform, they would soon supersede the use of it. But not to dwell upon these and allied matters, I would be allowed to reproduce literally and without comment what I then said of protoxide of nitrogen; first relating some of the experiments in which it was administered to animals, and then the deductions drawn from them; the correctness of which I now do not see any reason for doubting."

Mr. Nunneley gave, in that essay, an account of numerous experiments, which will be found fully recorded in the volume of the *Transactions* above mentioned. In now referring to them, he observes:

"The experiments show that, though transient unconsciousness may be induced by it, the gas can never be used for prolonged or serious operations; that it is most uncertain in its action upon animals of the same class; that the boundary

between light sleep and death is ill-defined and capricious; and that neither in its chemical constitution nor its physiological action does it much, if at all, resemble the true anæsthetics; for while with them, though every other element may be excluded, carbon must always be present, and the condition of the blood, heart, lungs, and other viscera, after death from it, is dissimilar from the condition after death from them, these objections are quite sufficient, without taking into account the many inconveniences of its preparation, preservation, and transportation, to prevent its ever being employed in the actual practice of surgery. I would venture to caution all who may be tempted to employ the protoxide of nitrogen, to be most careful in so doing, or I cannot but greatly fear that the lives of their patients will most painfully prove its dangerous character; while I do not see one single advantage which it possesses over those liquid anæsthetic substances which are in all respects so much more convenient and manageable. If any one prefer to use a gas rather than a liquid, let him employ common coal-gas, which is an excellent true anæsthetic, effective and safe in action, easily managed, always to be procured, very cheap, and, when tolerably pure, not followed by any unpleasant consequences. It is far safer and more effective than either the heavy or the light carburetted hydrogen alone, however pure these may be, and one which, the four fluids—bromide of ethyl, chloride of olefiant gas, chloroform, or bichloride of methyl (chloride of carbon)—not being procurable, I should not, in an emergency, hesitate to use."

Religious Persecution in the Nineteenth Century.

The able correspondent of the *American Literary Gazette* gives the following account of a struggle now going on in Paris between medical science and religious dogmatism:

"Some dull but zealous fellow has just petitioned the French Senate to redress the grievance all devout people feel they have in the pernicious doctrines taught in the Paris Medical School, which sap the very foundations on which not only religion, but society rest. These are the allegations made by the petitioners. Dr. SEE said: 'The nervous substance's property is to think, and when it dies thought will not find a second life in a better world. Matter is the god of science. If a man has a soul, the monkey likewise has a soul; if the monkey has no soul, then man has none.' Dr. VULPIAN said, in eulogizing MALTHUS: 'Wherever easy circumstances increase, there also paternal care should increase to avoid begetting many children.' Dr. SEE is further accused of lending his countenance to a deplorable thesis. Last December a thesis was presented by a candidate, Dr. GRENIER, for a diploma. The thesis was entitled, 'Medico-Physiological Study of Human Free-will.' Dr. GRENIER requested one of the professors to accept the place of President of the Board of Examiners. When he told the professor the subject of his thesis, the professor declined, 'and there is good reason to believe he informed his colleagues of his refusal.' Dr. SEE, however, accepted and signed the thesis, occupied the chair at the Board of Examination, allowed Dr. GRENIER publicly to sustain the truth of his thesis, and declared the examination satisfactory, and granted the diploma to Dr. GRENIER. In this thesis Dr. GRENIER not only denied a future life and future rewards and punishments, but he denied free-will. He asserted man was an irresponsible agent, because he was not a free agent. He asserted there was no such thing as conscience; he declared man to be but an animal, such as the beasts of the field; and he asserted society had no right whatsoever to judge or to punish man for crimes. If there is an obscure publication in the world—if there be a pamphlet predestined to the rag-picker's basket, it is a thesis. The most pernicious doctrines may be broached in it with as much impunity as the right to assassinate our enemies may be advocated in an empty coal cellar. But some zealous person got hold of this thesis, and made so much noise about it as to attract the attention of the clergy and the government. Pressure was put upon the Minister of Public Instruction to force him to punish the professor and the student who were connected with this thesis. The minister laid the matter before the Academic Council, and requested it to annul the diploma. The Council replied it had no jurisdiction. Thereupon the minister decided he could annul the thesis, examination, and diploma, and he did annul them. He went further; he ordered the professor to be reprimanded before the Academical Council, and record to be made of this reprimand in the notes on the professor (kept in the government archives), and on the registers of the Academy of Paris, and of the Medical School. The French Senate have postponed the debate on this question to suit the Cardinal's convenience. The discussion will be angry. M. SAINTE-BEUVE takes no pains to conceal that he will make a *virulent* speech on the question. I ought to add, the professors deny having made the remarks imputed to them.

Dandruff.

The *Jour. of Applied Chemistry* has the following observations on this common and troublesome affliction:

"It is due to an excessive secretion from the sebaceous glands, and results in an accumulation of this secretion upon the surface of the scalp, which, unless frequently removed by mechanical means, or by a proper solvent, is soon converted into sebacic acid, mixed with particles of dead epidermis, forming whitish or yellow scales, which may be removed by scratching or brushing. Sebacic acid is but very sparingly soluble in cold, but more soluble in warm water, soluble in ether, alcohol, and the fatty and essential oils. It easily unites with ammonia, forming *sebate* of ammonia, which is readily soluble in water, with soda, it forms *sebate* of *soda*, which is soluble in water, but less so than the corresponding potash salt. It would therefore seem that a weak solution of carbonate of potash would be better than one of sal soda. When any of these solutions are used for removing dandruff, the soluble sebate should be washed off with cold, or slightly tepid water, and the head thoroughly dried, after which a little oil, either alone or dissolved in alcohol, should be applied. In the aggravated form of pityriasis, called *porrigo amiantacea*, which is more common in women than men, it is attended with a loss of the hair, which, however, will grow again upon removal of the cause. These alkalies do *not* tend to produce rather than prevent the disease, but unless the resulting compound is thoroughly washed off, as directed above, it may lead to another form of *pityriasis simplex*, which is due to a deficient secretion from the sebaceous follicles, and may be produced from the use of strong alkalies or soaps, or by exposure to very dry winds, or the use of hard water. The formula of sebacic acid is

$$C_{20}H_{18}O_8,$$

and, as a general rule, the alkaline sebates are readily soluble in water, those of the alkaline earths with difficulty soluble, while those of the heavy metals are insoluble. Hence, aside from the poisonous qualities of hair-washes containing lead, to which we have more than once alluded, the insolubility of the resulting sebate of lead would also form an insuperable objection to their use. The same cannot be said of a wash or dye containing nitrate of silver, inasmuch as the resulting oxide of silver is dissolved in aqua ammonia, which is on the other hand the base of a soluble salt with sebacic acid. The sebaceous lands of other portions of the body besides the scalp secrete this matter, and it should in like manner be removed by frequent ablutions with soap or alkali and water, also taking care to remove all their traces by a second washing in pure water. While the system is in a normal, or healthy condition, dandruff or scurf will always accumulate on the surface, unless removed by the mechanical or chemical means to which we have alluded. We have never been called upon to analyze the wash you mention, and know nothing for or against it."

Nasal Therapeutics.

At a recent meeting of the Liverpool Medical Institution, reported in the *British Medical Journal*, Dr. Banks, one of the members, made the following extremely practical remarks on the Application of Remedies to the Nostrils and Larynx.

"Weber, of Leipzic, discovered fifty years ago that, when a column of water was passed along one nostril, when it touches the soft palate, it causes it to rise so as to shut off the nasal from the pharyngeal cavity, so that the fluid is compelled to return through the other nostril. Weber, of Halle, first put the principle into practice; and in 1864, Dr. Thudichum invented an instrument, and published some papers on the subject. The points to be attended to in using the instrument were the following: 1, the nozzle should fit the nostril accurately; 2, in children and nervous people, the full stream should not be turned on at once; it should be allowed to pass in gently at first, and then gradually increase in volume and force; 3, the current should be reversed occasionally. Cold water is irritating; and, therefore, tepid water, or a solution of an ounce of salt in a pint of water, may be used, followed by a deodoriser, as Condy's fluid, liquor carbonis detergens, or especially carbolic acid, and afterward a stimulant astringent, as alum, (one drachm to the pint,) sulphate of zinc or copper, (from ten to thirty grains to the pint,) etc. The solution should not be too strong at first. The instrument was also useful in some surgical accidents, such as foreign body in the nostril and severe epistaxis, when some dilute hæmostatic should be employed. Dr. Skinner had been practically making use of this principle before Dr. Thudichum's paper appeared, the instrument employed being a Higginson's syringe. The author had found Mr. Bryant's mode of treating nasal polypi, by blowing tannin into the nostrils through a quill, very satisfactory in some cases, especially soft and gelatinous polypi. Another troublesome

affection—a chronically swollen and thickened condition of the nasal and palative mucous membrane—was benefited by the administration of iodide or bromide of potassium; but local astringents were also useful, and were best applied by means of the spray producer. The best applications were glycerine of tannic acid, (one scruple to one ounce of water), or a solution of iodine, with a small quantity of carbolic acid. Speaking of affections of the throat, the author observed that, of the various instruments devised to bring remedies into contact with the air-passages, the spray-producer was the best. Its use was very great in chronic laryngeal affections, and also in many acute affections, as putrid sore throat and scarlatinal cynanche, and diphtheria. The spray-producer could not be employed with very potent remedies, such as strong solution of nitrate of silver. A piece of whalebone, bent at an obtuse angle near the end, and having a brush (better than a sponge) attached to it, was the best instrument for applying these. Care and dexterity are requisite in using it."

Poisonous Articles in Common Use.

The Berlin *Allgem. Medecin. Central-Zeitung* calls attention to several articles in common use, which are dangerous to life and health. They are:

Stearine Candles. One kind of these are remarkable for the alabaster whiteness; when broken they show rather a spongy than a crystalline texture, and on burning emit a feeble garlicky smell, and a slight white smoke. These contain *arsenic*, and should be avoided.

Visiting Cards. Some of these present a brilliant white crystalline superficies, which readily separates from the body of the card when it is bent. This is produced by a thin layer of acetate of lead, and therefore children should never be allowed to play with such cards.

Blotting and filtering paper. Much of this is used by confectioners, cooks, and druggists. That cheap quality, which is of a light-grey color, is made from paper cuttings and old carpets, and is seldom entirely free from arsenic and other mineral poisons, which are used in dying these latter. A chemical examination disclosed one grain of white arsenic, five-sixth grain oxide of copper, one-quarter grain oxide of lead, in twenty-five grains of this paper. It should never be applied to such purposes.

Woolen Dyes. The dyes now largely employed in woolen fabrics are often deleterious, and even the time-honored red flannel as it is now manufactured may be positively injurious when worn next the skin, owing to the danger of absorption. It is better to use white than colored under garments.

Reviews and Book Notices.

NOTES ON BOOKS.

These are among the late publications: Dr. P. J. M. BRASSAC'S "Essai sur l'Elephantiasis des Grecs, lepre phymatode et aphymatode," (republished from the Archives de Médecine Navale"); CHEVREUL'S "Report on Observations concerning Cow's Milk affected with the disease vulgarly called *La Cocotte*," presented to the Academy of Sciences by Dr. AL. DONNÉ; Dr. E. LANGLEBERT'S "Aphorismes sur les Maladies Vénériennes; "Message Polonais aux Parlements d'Europe," (pp. 380); Dr. A. F. DUTROULAU'S "Treatise upon the Maladies of Europeans in Hot Climates," (intertropical regions); Dr. A. GUBLER'S "Commentaires Thérapeutiques du Codex Medicamentarius," or History of Physiological Action and Therapeutic Effects of Medicine recorded in the French Pharmacopœia, (8vo., pp. 758, 12f.); Dr. A. DOYON'S "De l'Herpès recidivant des Parties Génitales."

The third and final volume of Professor RICHARD OWEN'S great work on the "Anatomy and Physiology of Vertebrate Animals," is announced by Messrs LONGMAN, of London, as nearly ready.

Prof. WUNDERLICH'S treatise on the Clinical Application of the Thermometer, is meeting with much favor.

Dr. TROLTSCH, POLITZER, and SCHWARTZE, some four years ago, founded at Wurzburg, the *Archiv für Ohrenheilkunde*, specially devoted to otiatry. Last year, at Berlin, a new journal devoted to the same specialty, made its appearance. It is entitled, the "*Monatsschrift für Ohrenheilkunde*," and is edited by VOLTOLINI, GRUBER, RUDINGER, and E. WEBER, all distinguished names.

The *College Courant* is a handsome weekly of eight large quarto pages, published at Yale College, ($4.00 a year.) It contains collegiate news from all parts of the Union, and numbers among its contributors some of the most distinguished professors and teachers in our country. It is well edited, and merits extensive patronage.

We have received the 29th Annual Circular of the Baltimore College of Dental Surgery, 1868, the Triennial Catalogue of the same institution, and the Circular and Catalogue of the Albany Medical College. Also, Memoranda from the Clinical Course of Instruction in the Medical Department, University of Louisiana, republished from the *New Orleans Journal of Medicine*, a pamphlet of 90 pages, containing a quantity of useful, practical matter.

Medical and Surgical Reporter.

PHILADELPHIA, JULY 18, 1868.

S. W. BUTLER, M. D., & D. G. BRINTON, M. D., *Editors.*

☞ Medical Society and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc. etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical, brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

THE HYGIENE OF SCHOOLS.

Nothing deserves the earnest attention of the hygienist more than the theme we have placed at the head of this article. Nothing is more systematically and generally neglected. We venture to say that there is not one, either public or private school in a hundred, where a thoroughly enlightened regard for the welfare of the young student is manifested. Either the rooms are illy ventitated and warmed, or the dormitories are crowded or cold, or the washrooms damp, or the construction of the desks and seats are faulty, or the hours of study are excessive, or the diet is insufficient or improper, or the character and amount of exercise are not well regulated, or the attention to dress and cleanliness is insufficient, or the buildings are unsuitable, or injurious punishments are in vogue, or in one of the many other ways that suggest themselves, the scholars are made to suffer.

These facts are notorious. Even the non-medical press are calling attention to them. This very day, we have seen in the daily papers not less than three paragraphs on the subject. One editor asks, writing with the thermometer at 95,° "What do school controllers mean, keeping children in school, sixty in a room, such days as these? What does the Society for the Prevention of Cruelty to Animals think about it?"

Another daily refers in strong terms, to the last report of the Board of Education of Massachusetts. This report contains important statistics as to the exhausting effects of over exertion of the brain. In one school of 85 pupils, only 54 had refreshing sleep, 59 had headaches or constant weariness, and only 15 were perfectly well. The cause of this is thus accounted for: The most celebrated medical men, according to facts and opinions, given in the report, show that the hours devoted to brain work should not exceed *six* hours for healthy men, and *three* hours for children. But in the above school it was found that in addition to the six hours of school, 31 studied 3½ hours, 85 four hours, and 12 from four to seven hours. The report states, that in places where the schools are highest in reputation, the above example is the common experience. But it is even worse in England. The recent report of the Commissioners in the Schools Inquiry, reveals a state of things which we did not suppose existed, since Dotheboy's Hall disappeared. There are many schools there, chiefly in remote country places, disgraceful to a civilized country. One master admitted that the staple nutriment of the boys was bread—he said he always carved the meat himself, proportioning the quantity to the size of the boy, and that no boy was allowed to be helped the second time. In the matter of lodging, there was more general ground for complaint. They found the floor of one chamber covered so thickly with beds, that the boys must have dressed and undressed standing on them. Miserable, dirty-looking beds they were. In other instances the overcrowding was quite as reckless. As to discipline, it would be easy enough over such feeble, dejected looking boys as most of them were. There was something almost painful about their aspect—no color in their cheeks, no animation in their answers, no glee in their sports.

We hope the attention of parents will be called to these points by their family physicians, so that an enlightened public opinion will force attention to these essential points.

[☞ *Readers of the* Reporter *are invited to send us copies of local Newspapers, and similar publications, from all parts of the country, which contain matters of interest to the profession. They will be thankfully received, and acknowledged under "Communications received."*]

Notes and Comments.

Hydrophobia.—A Popular Medical Error.

An instructive article, if not a whole volume, might be written on the vulgar errors of physicians. None is more absurd or unfounded than that which supposes hydrophobia to be peculiar to or more frequent in the hot months. The muzzling of dogs at such times is a relic of mediæval superstition. It originates from some popular notion concerning the "dog days," which in turn derive their name from the periodical change in position of the "dog star" Sirius. In point of fact hydrophobia is more frequent in January than in August, and to put muzzles on dogs in the summer season when they are so thirsty, is a piece of useless and wanton barbarity. We are glad to learn that the town of West Chester, in this State, proposes to take the initiative in this matter, and do away with this antiquated habit. Let other and all towns follow this example.

Infant Mortality.

In the Vienna Medical Society, says the 10th June number of the *Allg. Med. Central-Zeitung*, Professor SKODA brought forth some really fearful statistics of the foundling hospital in that city. From 1784 to 1866, 434,687 infants were received in that institution, of whom there died before their tenth year 315,323, about 78 per cent. What is more, so far from decreasing in later years, this mortality has been actively on the increase. From 1853 to 1866, the admissions were 127,183, of whom 101,922 have died, therefore *more than* 80 per cent.

To Prevent Death by Chloroform.

MM. ONIMUS and LAGROS have proposed to the French Academy of Sciences, a method of revivification, which promises to prevent death from an improper or inordinate use of chloroform. They have had recourse to continuous currents, with, it would seem, great success, by using from 14 to 30 of Remak's elements, the animals subjected to experiment being dogs, rabbits, rats, frogs, capybaras and tritons. The modus operandi was as follows: The animal, a rat, for instance, was placed under a glass receiver, together with a sponge strongly impregnated with the anæsthetic. In the course of a minute it would fall fast asleep. By degrees its breathing would gradually abate, and finally stop. Another half minute being allowed, it was then taken out, and the negative pole of the pile put into its mouth, the positive one communicating with the rectum. After the lapse of a few seconds, the heart which had ceased beating, would show signs of returning animation. Respiration would then recommence, and the animal gradually return to life, the electrization being suspended as soon as breathing, though still weak, had become regular. In some cases the subject of experiment was left for two minutes in a state of apparent death, and yet revived, by means of the continuous current.

The Army Medical Staff.

The following changes have taken place in the regular army medical staff, since April 1, 1868.

PROMOTED.—Assistant Surgeon J. H. Frantz, to be Surgeon, to date December 19, 1867, vice Ten Broeck, deceased.

RESIGNED.—Assistant Surgeon E. J. Darken, to date April 2, 1868; Assistant Surgeon A. H. Smith, to date April 24, 1868; Assistant Surgeon W. R. Ramsey, to date June 19, 1868; Assistant Surgeon T. E. Wilson, to date July 1, 1868.

DIED.—Assistant Surgeon W. M. Austin, May 9, 1868, at Camp Concordia, Texas, of pneumonia.

CASHIERED.—Assistant Surgeon C. C. Dumreicher, by sentence of General Court Martial, approved June 17, 1868. General Court Martial, Orders No. 29. Headquarters of the Army, Adjutant-General's Office, Washington, June 17, 1868.

The Typhus Epidemic.

In Naples the typhus fever is still raging. There are now in the hospitals 600 cases, of which, on the average, four die daily. More women than men are attacked. In North Prussia the disease is on the decrease, but only after desolating whole villages. About twenty-five physicians have fallen victims to it at their posts of duty. The treatment adopted as most successful, is by large doses of quinine, and the free use of ice and cold water, with stimulants. In Algiers, where nearly one hundred thousand persons are said to have succumbed to the famine and the fever, it is now diminishing.

—— The Indiana papers caution the public against eating the bass fish, until the locust season is over. The locusts falling into the water are eaten by the fish, and become poisonous, and unwholesome in consequence. A number of families are mentioned as having suffered severely from eating locust-fattened bass.

Correspondence.

DOMESTIC.

Stricture of the Cystic Duct with Obstruction. (Answer to Dr. Crothers.)

Editors Med. and Surg. Reporter:

The case of Dr. Crothers in your issue of June 6th, suggests the following: Pad McErmon, Co. K, 20th Infantry, aged 23, unmarried, strictly temperate. Has been exposed to malarious influences for a year past, and in consequence thereof, a frequent inmate of the hospital. The patient was originally quite robust, and of fine physique, but in consequence of long continued malarial poisoning, first came under my charge on the 14th of May last, greatly prostrated in mind and body, while suffering at the same time from "remittent." He received at first a saline, and shortly afterward a strong emeto-cathartic, which acted thoroughly. The usual treatment of diaphoretics, etc., so far relieved him, that he was returned to duty on the 18th. Sunday, the 24th of May, I found him at day-break retching and vomiting at my door. He informed me that he had been sick since the day previous: being admitted to hospital, he received 15 grains of calomel, in three grain doses, repeated every fifteen minutes. Relief was but partial. He continued to vomit fluid of a dark green color, until I saw him again on my round at 9, A. M. His condition was as follows: face flushed, skin hot and dry, pulse 120, full eyes injected; the sclerotica being of a bright-yellow hue, as was the whole surface of the body. Great pain was experienced in the back and limbs, and to a slight degree in the head. At 10, a stool was passed odorless, of a tarry consistency; throughout the day and following night vomiting continued without cessation or relief; nothing could be retained in the stomach. Every remedy which ingenuity could devise was tried without success. Day by day the patient sank, until death closed the scene on the 31st. Strength was supported by nutritive and stimulant enemata, and sub-cutaneous injections of quinine. On the last two days the patient would for 30 minutes at a time retain a little beef-tea, only to again vomit green stringy matter, which stained the floor and clothing alike. A small amount of blood from a chicken was twice transfused with no permanent benefit.

Autopsy four hours after death.

Opened thorax, some f.℥ijss. of fluid were found in the pericardial sac. The right lung was compressed by an enlarged liver to which it had formed firm adhesions through the diaphragm. By reason of this compression the whole surface of the lung behind and before was attached to the ribs by firm fibrinous adhesions, which could only be separated by the scalpel. The left lung showed the compression of the right, though in a less degree, being quite free at its aperture. Evidence of old pneumonia existed, although the majority of lung substance was healthy in both. Heart and large vessels normal, liver of a dark color, and much engorged, weight 70 ounces. Section showed the effects of congestion in a moderate degree. *The gall-bladder was somewhat distended, containing about* 10 *drachms of a dark substance, of a consistency similar to that of silicic acid in solution.* The cystic duct at its union with the common, was *completely obstructed*, being also partially ulcerated, so as to easily separate on tension. The disease seemed to have attacked the common duct as well, but owing to the want of a microscope, could not be distinguished from an ordinary ulceration. The obstruction did not partake of the nature of a concretion, but in my opinion began in a hyperæmic condition of the internal coat of the gall-bladder, at or near the spot where the mucous membrane projects inward, so as to form valvular folds. It is probable that the obstruction was only temporary, and could have easily been overcome if the patient had not previously been debilitated by repeated attacks of remittent fever. Watson observes "that jaundice is a frequent consequent of billious remittents, while the remittent fevers of Bengal are invariably connected with local congestions, which often run rapidly into inflammations, attended with much interstitial effusion." The cephalic thoracic and abdominal viscera are in turn liable to be attacked. In this locality the *lungs and liver* are most frequently affected in *adults*, while *children* are prone to fatal congestions of the *brain and intestines*, which are so insidious, as often to escape the attention of the physician, until past remedy. Several cases of pneumonia now under treatment at hospital are clearly traceable to a malarial origin. Indeed it is highly necessary to daily examine the lungs, of those patients who are suffering from remittents, in order that mischief so prone to occur, may be checked in its incipiency.

The spleen in the present case was dark-green, and engorged. The remaining abdominal organs showed abundent evidence of congestion; otherwise normal. In Doct. Crother's case, it seems

to me that the phenomena were those of ordinary *icterus*, so far as the immediate cause of death was concerned. The former injury undoubtedly caused the constriction, while the formation of concretion can be regarded rather as collateral than a direct sequel. Professor JACKSON, Instructor in Morbid Anatomy at "Harvard," has collected many interesting specimens, which prove conclusively that injuries which *at the time* may be regarded as *slight*, often prove the remote cause of complaints, such as scirrhus tumors, perforations, et cetera. Perhaps many of your readers may recollect instances where they were morally certain that an injury was *the direct cause of an affection*, and yet to argue cause and effect by any direct course of reasoning, would be exceedingly difficult, if not impossible.

CHANDLER B. BRAMAN, M. D.

Brighton, Massachusetts.

Cases from Practice.

EDITORS MED. AND SURG. REPORTER:

I send you the following cases:

Case 1. *Exfoliation and necrosis of femur.* C. R. Sr., æt. 66 years; native of France. When 13 years of age, while sportively running a horse race, was thrown, receiving considerable contused injury about the left knee, attended with usual concomitant effects; shortly after receipt of injury, leg on each side of knee was lanced and thoroughly explored by a French Surgeon, considerable pus escaping, no fragments of bone being detected; remained under treatment of this gentleman for sometime, with no improvement; anchylosis of knee-joint gradually supervening, with establishment of sinuous aperture. Subsequently, within some months, was under treatment of other physicians without benefit. Came to America 23 years ago; settled in Clearfield county, Pa., where he has struggled in his poverty, (raising a family of two or three boys,) with stiff leg, and ugly discharging ulcer. January 30th, 1868, I was called to see this man (when the above history was narrated to me); found him with injured limb much larger than its fellow, foul ulcer, callous edges, considerable induration of adjacent muscular and fleshy parts, sero-purulent discharge, etc., general condition of patient not so bad, spirits dejected. On my entrance, says he, "Dr., for God's sake, do something for me, cut my leg off, or kill me, I do not wish to live this way." Anæsthesia was produced, and on examination necrosed bone was detected; the aperture was enlarged, and a piece of exfoliated bone, some three inches in length, and from one to two inches in width, was removed; with instruments considerable dead bone was removed by pieces, until all had been obtained. The wound was thoroughly cleansed and dressed with weak lotions. Argenti nitras—ung. hyd. nit. applied externally, the limb strapped and bandaged, from the toes upward. Stimulants and narcotics exhibited pro re nata; this treatment was persevered in until March 27th following, when my visits were discontinued. On the 7th inst. I met the old gentleman at a public gathering in this county, the wound having healed; he was able to hobble around very well with a cane, and expressed himself better than he had been for years. The above case is introduced illustrative of the loathsome and long continued amount of suffering produced from causes, the origin of which are apparently so trivial.

Case 2. *An early effort at ovulation.* A. B., æt. 11; fine, healthy looking girl; parents stout and healthy; father, a blacksmith; was called to see her June 28th, 1867; the following history of her case was elicited: For more than twelve months past, at intervals of about a month, she would generally complain and remain unwell for from two to five days, complaining as at present of pelvic and abdominal pain, and acting as the parents represent as a woman with her monthly periods, except that she has no discharge; in development the girl presented none of the appearances peculiar to adult life: for this singular state of affairs a physician had been consulted, who advised non-interference, stating that matters would be rectified when the girl grew older, but the parents had followed his advice now for some months, and instead of getting better her troubles seemed to augment at each attack, which now occurred, if anything, more regular. On my arrival she was complaining considerably of pain in the lower part of the abdomen, had some fever, tongue slightly furred, countenance suffused, pulse accelerated, bowels confined. ℞. Ol. ricini, f.℥j., ol. terebinth, gtt. v. M., every three hours, in a little fennel water, until the bowels be well moved; also, ℞. Sp. æther nit, f.℥ss., every three hours, and direct that the bowels be constantly covered with flannels wrung out of hot water. For four days in succession this girl suffered at intervals, considerable pain. Cathartic, alterative and anodyne remedies were alternately exhibited. At the end of four days the girl resumed her sports with her companions. During the interval it was directed that the following remedies be tried: ℞. Nitrat. potassæ, ℥j., tart. ant., gr. j., hyd.

chlor. mit., gr. iv. M. ft. ch. no. xij. Sig. One to be taken three times a day, with an occasional dose of castor oil and turpentine, as may be required to keep the bowels soluble. August 31st following, I was again called to see this girl suffering as formerly, but not so severe this time, her attack only lasted two days, and was much milder than previously; the same remedies were directed to be continued, and since said last attack the girl has been entirely freed from her troubles; was this an effort at ovolution?

Oran A. Rives, M. D.

Frenchville, Pa.

News and Miscellany.

Leeches in Paris.

It appears that Paris is the best market in Europe for leeches, and that an extensive business is transacted in this commodity. Italy principally supplied the article, but the mouth of the Danube is now the best fishing-ground, and from Trieste no less than £120,000 in value of leeches are annually sent up to Paris. But the leech most in fashion just now is a native of Australia; he is said to be endowed with livelier qualities, and does his work in a shorter period than any of his European brethren. The Egyptian leech is, however, a serious competitor, for so great are his powers of absorption that the Viceroy has granted a monopoly of the 3,000,000 bloodsuckers which are annually to be found in the bed of the Nile, after the periodical inundation of that river, to a French dealer. On arriving in this capital, the leeches not required for active duty are sent to Gentilly, where they are lodged in reservoirs comfortably furnished with the greasy mud in which they specially delight, and filled with greenish water. Each reservoir is 50 feet by 30 feet.

—— There will be no lecture term of the Berkshire Medical College at Pittsfield, Mass., this year, and probably the institution will be abandoned or greatly modified in its character. It was incorporated in 1822, and for many years had a flourishing existence.

—— Dr. C. T. Schuman, who was tried in the Criminal Court at Cincinnati recently, and found guilty of malpractice in producing abortions, has been sentenced to pay $500, and sent to the city jail for 30 days.

[Notices inserted in this column gratis, and are solicited from all parts of the country; Obituary Notices and Resolutions of Societies at ten cents per line, ten words to the line.]

MARRIED.

Black—Kline.—June 4th, 1868, at the residence of the bride's mother, Bolivar, O., by the Rev. A. R. Smith, William R. Black, M. D., of Sandyville, Ohio, and Miss Addi Kline.

Camden—Holl field.—In Philadelphia, on the 26th of June, by the Rev. John Chambers, John A. Camden, M. D., of Virginia, and Miss Mary Hollfield, only daughter of the late Dr. W. L. Hollfield, of Middle Georgia.

Cox—Hefsey.—At the Episcopal Church in Quincy, Ill. June 17th, 1868, by the Rev. Sidney Corbett, D.D., Dr. G. W. Cox, of Clayton, Ill., and Mollie V., daughter of Wm. Hefsey.

Hillis—Horton.—At the residence of Dr. G. F. Horton, Terrytown, Pa., June 30, 1868, by Rev. David Craft, Wm. J. Hillis, M. D., of Barclay, and Miss Debbie E., daughter of Dr. Horton.

Price—Taylor.—On the 2d inst., by the Rev. J. S. Peregrine, assisted by Rev. Mr. Fullerton, at the home of the bride, with Mr. and Mrs. Geo. Fox, on Walnut Hills, Cincinnati, Ohio, Miss Hannah B. Price and John C. Taylor, M. D., of Cambridge, Guernsey county, Ohio.

Robinson—Lancaster.—July 7, 1868, at the Seventh Presbyterian Church, by the Rev. James L. Crowell, D.D., C. M. Robinson, M. D., and Miss Mary E. daughter of John Lancaster, all of this city.

Vance—Whitaker.—By Elder S. R. Willson, at his residence, in Connersville, Ind., on the 1st inst., Dr. S. W. Vance and Mrs. Adelaide Whitaker, both of the above city.

Van Tuyl—Cheeney.—At Prattsburgh, N. Y., June 8th, by Rev. D. D. Gregory, Maj. Benjamin Van Tuyl and Kate, daughter of Walter S. Cheeney, M. D.

West-West—On the 1st of July, 1868, at No. 2008 Sansom street, Philadelphia, by Rev. T. B. Miller, M. D., James D. West, M. D., and Miss Annie M. West, both of Sussex county, Delaware.

DIED.

Butler.—In West Philadelphia, July 13, 1868, of cholera infantum, Louisa Cuvier, infant child of Dr. S. W. and Mrs. Anne H. Butler, aged four months and twenty days.

Grier.—In Elizabeth, N. J., July 11th, Mrs. Margery D. Grier, wife of Dr. P. H. Grier, Mayor of that town.

McCartin.—In New York, July 12, Mary Emma, wife of H. E. McCartin, M. D., and eldest daughter of R. A. Barry, M. D., in the 21st year of her age.

ANSWERS TO CORRESPONDENTS.

Dr. A. D. B., of Pa.—Prof. Gross' Surgery has not passed to a third edition. The latest (second) edition costs $12 00.

Dr. J. H. B., of O.—The article you wish is very hard to get, but we will make inquiries, and send you one, if obtainable.

Dr. J. H. S., of Pa.—"I have been informed that the Legislature passed an enactment, allowing physicians who are instructing students, the privilege of one subject each year for dissection. Do you know of the existence of such a law?" There is no such law. You are probably thinking of the Anatomy Act, which allows unclaimed bodies in some public institutions to be used for dissection. But all traffic in them is forbidden, and they are not allowed to be sent out of the State.

METEOROLOGY.

June.	29,	30.	J. 1,	2,	3,	4,	5.
Wind	S.	S. W.	S. W.	S. W.	S. W.	S. W.	S.
Weather	Clear.	Clear.	Clear.	Clear.	Clear.	Clear.	Clear. Sh'r. l't'ng.
Depth Rain.							
Thermometer.							
Minimum	60°	58°	61°	65°	69°	68°	72°
At 8, A. M.	70	69	69	77	81	82	84
At 12, M.	82	73	82	87	90	90	62
At 3, P. M.	83	79	84	90	91	92	93
Mean	78.75	69.75	74.	79.75	82.75	83.	85.25
Barometer.							
At 12, M.	30.2	30.3	30.3	30.3	30.3	30.3	30.1

Germantown, Pa. B. J. Leedom.